



3M™ Wrap Film

Series 1080

Product Bulletin

Product Description

3M™ Wrap Film Series 1080 are long-term, dual cast films designed for solid color vehicle detailing, decoration and full wraps without the need of additional graphic protection.

These vinyl films are sold in 1.52 m wide rolls, allowing almost any section of a vehicle to be wrapped without seams.

3M™ Wrap Film 1080 uses 3M™ Controltac™ and 3M™ Comply™ technology.

3M™ Controltac™ minimizes the initial contact area of the adhesive and allows the applicator to reposition the film during application.

This allows easier installation of large format graphics in a wide temperature range.

3M™ Comply™ are air release channels allowing fast and easy, bubble-free application of films.

| | | | |
|---------------------|--------------|----------|--|
| Product Line | Car wrapping | 1080-GX | X = color code, glossy, permanent adhesive with Comply™. |
| | | 1080-MX | X = color code, matte, permanent adhesive with Comply™. |
| | | 1080-BRX | X = color code, brushed, permanent adhesive with Comply™. |
| | | 1080-CFX | X = color code, carbon fiber, permanent adhesive with Comply™. |
| | | 1080-SX | X = color code, semi-matte, permanent adhesive with Comply™. |

Product Characteristics

Physical & Application

These are typical values for unprocessed products.
Contact your 3M representative for a custom specification.

| | | |
|-----------------------------|---|---|
| Material | cast vinyl | |
| Surface finish | glossy and matte, textured surface (see product line) | |
| Thickness (film) | 90 µm (0.09 mm) | |
| Adhesive type | solvent acrylic, pressure-sensitive, repositionable | |
| Liner | double-sided Polyethylene coated paper | |
| Adhesion | approx. 20 N/25 mm | FTM 1: 180° peel, substrate: glass; cond: 24 h 23°C/50%RH |
| Additional reference | Automotive paint: approx. 11 N/25 mm - approx. 22 N/25 mm | |
| Application method | dry only! | |
| Applied shrinkage | < 0.4 mm | FTM 14 |
| Application temperature | +16°C | for flat surfaces |
| minimum (air and substrate) | +16°C | for curved to corrugated surfaces with and without rivets |

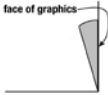
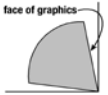
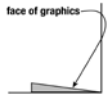
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|---------------------------|--|
| Service temperature | -60°C to +107°C |
| Surface type | flat to simple curved and moderate compound curves typical to personal vehicles |
| Substrate type | aluminum, PMMA, PC*, ABS, paint <small>*Might require drying with heat before use</small> |
| Graphic removal | Removable with heat and/or chemicals from supported substrates. No liability is given for ease or speed of removal of any graphic. Pay attention to adequate air and substrate temperature. |
| Storage Shelf life | Use within two years from the date of manufacture on the sealed original box. Use within one year after opening the box. |
| Storage conditions | +4°C to +40°C, out of sunlight, original container in clean and dry area. Store unpacked rolls vertically or hanging horizontally on storage racks. |

Flammability Flammability standards are different from country to country. Ask your local 3M contact for details, please.

Durability

Unprocessed film The following durability data are given for unprocessed film only!
3M™ Performance Guarantee and MCS™ Warranty In addition, 3M provides a guarantee/warranty on a finished applied graphic within the framework of 3M™ Performance Guarantee and/or 3M™ MCS™ warranty programs.
Visit www.3mgraphics.com for getting more details about 3M's comprehensive graphic solutions.

Climatic zones Graphic durability is largely determined by the climate and the angle of exposure. Find below a table showing the durability of a product according to the angle of exposure and the geographical location of the application.
Zone 1 Northern Europe, Italy (north of Rome), Russia
Zone 2 Mediterranean area without North Africa, South Africa
Zone 3 Gulf area, Africa

| | | | |
|----------------|---------------|--|--|
| Exposure types | Vertical: |  | The face of the graphic is ±10° from vertical. |
| | Non-vertical: |  | The face of the graphic is greater than 10° from vertical and greater than 5° from horizontal. |
| | Horizontal: |  | The face of the graphic is ±5° from horizontal. |
| | Interior: | Interior means an application inside a building without direct exposure to sunlight. | |

| | | | |
|--------------------------------------|---------------|---------------|---------------|
| Vertical outdoor exposure | Zone 1 | Zone 2 | Zone 3 |
| white/black | 6 years | 4 years | 3 years |
| colors | 5 years | 3 years | 2.5 years |
| metallics | 5 years | 3 years | 2.5 years |
| Non-vertical outdoor exposure | Zone 1 | Zone 2 | Zone 3 |
| white/black | 4 years | 2.5 years | 2 years |
| colors | 3 years | 1.5 years | 12 months |
| metallics | 3 years | 1.5 years | 12 months |
| Horizontal outdoor exposure | Zone 1 | Zone 2 | Zone 3 |
| white/black | 3 years | 2 years | 12 months |
| colors | 2 years | 12 months | 6 months |
| metallics | 2 years | 12 months | 6 months |
| Interior application | Zone 1 | Zone 2 | Zone 3 |
| interior | 10 years | 10 years | 10 years |

Notice! Durability statements for colors and metallics include brushed metal and carbon fiber finishes.

Limitations of End Uses

3M specifically does not recommend or warrant the following uses, but please contact us to discuss your needs to recommend other products.

Graphics applied to

- low surface energy substrates or substrates with low surface energy coating.
- stainless steel.
- surfaces not clean and more than moderate textured.
- surfaces with poor paint to substrate adhesion.
- other than flat or simply curved surfaces.

Note: When used on more difficult surfaces stress relief cuts are recommended.

- watercraft when the graphic is applied below the static water line.
- watercraft graphics that are not edge sealed.
- non-OEM painted substrates on most vehicles.

Graphic removal from

- signs or existing graphics that must remain intact.
- vehicles which do not have the original OEM paint applied.

Graphics subjected to

- regular exposure to gasoline vapors or spills at gas pumps, automobile fuel-tank ports.
- cut and weed applications where the application tape must adhere to the exposed liner.

Important Notice

- 3M Commercial Solutions products are not tested against automotive manufacturer specifications!
- To avoid color variations all pieces of applied film of one colored area should be processed out of the same roll of material. If more than one roll is needed for the application, material should be taken from the same lot. Color deviations of different lots or different manufacturing sites cannot be excluded.

Graphics Manufacturing

Flat, or rolled film side out on 130 mm (5 inch) or larger core. These methods help to prevent the liner from wrinkling or application tape, if used, from popping off.

Shipping finished graphics

Application See product bulletin ATR 'application tape recommendations' for information about selection and use of suitable application tapes for this product, please.

[> Product Bulletin Application Tape Recommendations <](#)

Refer to Instruction Bulletin 5.5 'select and prepare substrates for graphic application', for general application information.

[>Instruction Bulletin 5.5 'select and prepare substrates for graphic application'<](#)

Refer to Instruction Bulletin 1080 '3M™ Wrap Film Series 1080' for specific application information.

[>Instruction Bulletin 1080 '3M™ Wrap Film Series 1080'<](#)

Important Notice Post-heating of edges is required at temperatures between 40°C and 60°C. Squeegees with soft sleeves and wetting of sleeves are recommended in order to avoid scratches on film surface during application (e.g. 1080-G12 Black Gloss). Gloss films require high squeegee pressure to remove the air through the air release channels. Stretching of film at the edges should be avoided in order to avoid shrinkage and color fading. Excessive heat and stretch of light colors might result in change of gloss and colors.

Inlays and relief cuts in deep recesses are recommended.

Surfaces with high surface tension as e.g. car glass should be covered by masking or application tape in order to prevent adhesive residuals when removing the film from the substrate. Removal with slow speed and peel angle < 90° is preferred.

Color appearance of 1080 metallic films applied on the car might slightly change when applied on differently colored car paints.

It is recommended to apply 1080 metallic films and 1080 satin pearl films in same direction on visually adjacent car parts as e.g. doors and fenders of car body sides.

Maintenance and Cleaning Use a cleaner designed for high-quality painted surfaces. The cleaner must be wet, non-abrasive, without strong solvents, and have a pH value between 3 and 11 (neither strongly acidic nor strongly alkaline).

Refer to Instruction Bulletin 6.5 'storage, handling, maintenance and removal of films and sheetings', for general maintenance and cleaning information.

[>Instruction Bulletin 6.5 'Storage, Handling, Maintenance and Removal of Films and Sheetings'<](#)

Notice! The brushes and the wax used at automated car wash will cause that matte colors appear more and more glossy.

Remarks This bulletin provides technical information only.

Important notice All questions of warranty and liability relating to this product are governed by the terms and conditions of the sale, subject, where applicable, to the prevailing law.

Before using, the user must determine the suitability of the product for its required or intended use, and the user assumes all risk and liability whatsoever in connection therewith.

Additional Information Visit the web site of your local subsidiary at www.3Mgraphics.com for getting:
- more details about 3M™ MCS™ Warranty and 3M™ Performance Guarantee
- additional instruction bulletins
- a complete product overview about materials 3M is offering



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Responsible for this technical bulletin

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